

I went to the deactivation of the board. I was sad. I feel that it was a mistake. Why you have to lose those things is not clear, but it happened.

The Engineer Studies Group was called the Strategic Planning Group. Many outstanding engineers led the group-Dave Parker, Don Weinert, Bill Stewart, et al. Don now is the executive director of the National Society of Professional Engineers. George Orrell was a top civilian who went to the “new” FEMA. I turned to them to give me a hand with organizational matters. We put together, after testing it among ourselves, what I considered to be the optimum organization for the Office of the Chief of Engineers. That was the two directors with a support division of technical people, similar to the division-level organization.

We tested that in many different ways. We would cut it up, put it back together again, and I was impressed with how thoroughly and how well they did their job. They also helped develop the energy conservation plan for the Department of the Army. Don Weinert and his people came together with a plan of how we should go about that. We looked at drawing down the size of the Army - the Army, not the Corps. One analysis, which I thought was very valuable, was to determine the unused capacity of existing posts. How many more people could properly be put in, say, Fort Benning? It wasn't so much looking at which ones we should get rid of, but which ones could add capacity efficiently, and that would then free up space that could be assessed to fill needs or whatever.

Having discussed the trend that our public works program would atrophy and change as we had known it, the question arose, “What should be the future skill levels in the Corps? What kind of people should be in the Corps?”

Some of the kinds of people that we had needed in the past wouldn't be needed so much in the future, and some we didn't have in the past we'd definitely need in the future. The study group's analysis showed all of that. The thing I remember was that the crucial profession for the future was projected to be mechanical engineering.

So those are just three or four examples of the Engineer Studies Group, but they came directly to me. They helped a bit with the dredge privatization analysis, but not as much as Bill Murden and his people.

The third activity was Huntsville. I think I've already covered somewhat the training program within the Corps. John Bryson worked for me in Omaha as our personnel guy. He was a stick-out on the way he saw things. So he came to Washington about the time I came in to be director of Civil Works.

The Corps' training problem initially was an economy thing. District engineers were running schools that weren't compatible with what other district engineers were doing, as an example. So I asked John to analyze the on-going training. Out of that came the famous purple book of his that everybody came to know.

More fundamentally, it developed the Corps' “university,” or whatever you want to call it, at Huntsville. The center started off on a shoestring and now it's housed in a new building owned by the University of Alabama at Huntsville. The Corps is using some of those facilities. On a recent visit I was **really** impressed with how well the program has moved forward. It is a very good program.,

Training the Corps' people was the first objective, but the school should be able to pay for itself by training other people, doing work for others. Someday, soon I hope, the facility should become accredited. It could then sponsor a master's degree course in management.

Nowhere is there more and better talent than in the Corps' construction engineering management. While a bit visionary, that's a reasonably good job for someone to make happen.

I don't want to give you the idea that everything we did went through one of those three, but collectively, they were very helpful. I didn't believe in ad hoc committees. I may have told you that earlier. I felt that if you had to form an ad hoc committee, you should get rid of it as soon as possible. We had a couple of ad hoc committees, but they didn't last very long. They did their job, and then they were disposed of.

So I liked these three outfits. They earned their pay.

Q: You mentioned that you wanted to talk about energy conservation on the military side of the house.

A: That's correct, I'm glad you brought that back. The studies group came up with the only reasonable solution-to make a survey of major posts against certain criteria to see if they were operating as efficiently as they might, or could they be improved.

I was successful in getting the government, the Army, to budget a certain amount of money to do these surveys. After we made a few, the Energy Watch was implemented and overall energy consumption declined. The post commanders felt we were taking money that would have otherwise been theirs and using it for a specific subject. That may or not be true. If I had been a post commander, I would have felt the same way, I am sure, but my understanding was that most of that money was new money, not shaved off the top. Nevertheless, we did do the energy survey for the Army.

In the energy arena the Corps took the initiative for the Army. Another was mobilization, which we've talked about, and again, the studies group helped with that one.

Of course, the studies group didn't wait for the Chief of Engineers to call up and give them a job. They were always reviewing certain Corps missions. Don **Weinert** was very good, and George Orrell also was excellent. The two of them made a very nice team, and their presentations were high-type and professional in a quiet, not overly animated way. At briefings in the Pentagon they did very well. That helped George get the job in FEMA, I expect.

Q: I'd like to ask you now about your impact on the Corps' historical program, and your interest in the Historical Foundation. I think some of this accompanied the Bicentennial.

A: I have said several times that I believed that the people who knew the Corps liked the Corps. I knew the Corps had a great history. I did not inaugurate the history program. I don't mean to take any credit for that, but I do think that in the course of time, I had something to do with the momentum that the program developed, and maybe I don't deserve that either. Some of the things I did were probably forced upon me because of national attitudes towards the Corps, the recurring move to reorganize or put the Corps out of business, and my experiences in district work, particularly in Tulsa, where I soon learned that it was better to have the initiative than to react. If there was a problem, I tried to get it out in the public arena quickly before it got there from another source.

The same thing was true in Omaha, where we had such a reaction from the environmentalists and we were getting nowhere with the press until we established, as I mentioned, a separate arrangement with the local newspapers to put our office on somebody's beat.

After I came to Washington in 1972, I visited many of our projects. The one that sticks in my mind is Bonneville, where we had a beautiful visitors center right next to a well, I should back up a bit.

When I was in Tulsa, and also up in Omaha, I made sure we had good visitors centers, not as a matter of us popping out our chests so much as getting the visitors organized so they didn't get lost, injured, or do something dumb out of ignorance while they were on our property. So each project had a visitors information center and included an exhibit to say a little about the project and maybe about the Corps.

As a new director of Civil Works, I visited several projects including Bonneville, which is adjacent to a very lovely Department of the Interior fish hatchery. As you enter the project area you are greeted by an attractive sign that says, "You are now entering the Department of the Interior fish hatchery. Visitors welcome," et cetera. At our visitors center I began to ask visiting people, "Where are you?" They'd say, "Oh, we're at the Department of the Interior's fish hatchery." I thought, "This isn't too good."

We weren't doing a good job. I quickly required every dam or other public use facility to have a castle on it; also, that every project's visitors area include something about the history. Out of that we came up with the visitors center program in which every project had a visitors center, and a selected number of locations would contain regional visitors centers to tell the regional story and the history of the Corps.

So that kind of outgoing, best-foot-forward type of promotion was a little bit self-serving. There's no question about that. In fact, I got an article in Jack Anderson's column accusing me of beating the drum, tub-thumping. I wrote him back and said, "You're right. I'm the biggest tub-thumper they've got, and if I didn't do it, who would?" So he sent me an autographed picture to his favorite "tub-thumper," which was kind of neat.

The point was that I felt we needed to get the Corps out telling its story. Also, the district history program was moving along well, and just by accident, the Tulsa District's history was published while I was director of Civil Works. I began to read these histories and encouraged district histories be prepared.

As far as the Chiefs' and senior civilians' oral histories, like you're doing with me, is concerned, my only concern there was that we didn't miss somebody like General W.K. Wilson, who was senior-I wanted to make sure we got the older people in before it was too late.

Out of that, I developed a little book called *Corps Vignettes*, which may not have gotten much attention, but to me it was very nice. With the help of the historical folks, we accumulated 20 or 30, maybe 40 little stories, as you've seen. We published those in a nice cover which I gave to visitors. I must have given out hundreds of them. They made nice mementos, but the important value was that as people read them, they learned a little something about the Corps-the human side, not so much the technical stuff.

I think if you ask the people around, they will tell you that I was fairly aggressive in my efforts to improve the Corps' self-promotion.

Q: Then the Historical Foundation?

A: Oh, that's another. I always felt that there should be an organization, somehow or another, to do for the Corps what the Ordnance Association and what the Association of the United States Army, and so forth, do for the Army and for the other branches. We didn't have anything like

that. We had a museum out at Fort Belvoir, on the military, which was fine, but we had nothing to service the public works or engineer command side.

I was fortunate and honored to be selected as the Straub Lecturer for the U.S. Steel Association in 1976. I gave this lecture. Unexpectedly, I received a check in the mail for \$2,000 as an honorarium. Well, I couldn't keep the money, of course, but I did get permission to use it for a charitable, tax-exempt activity.

Manning Seltzer was brought in, and some others, and we started the Corps of Engineers Historical Foundation. That \$2,000 was used to finance the first move.

Well, we got off to a bad start in one sense. We had a strong group of people to help us. The idea was to do the history, to set up some scholarships, and to provide a source of pride and understanding of the role of the Corps of Engineers in the history of this country. The foundation was not intended to be a professional organization, or anything like that.

Two initiatives surfaced. One was the statue of the Army engineers somewhere in the Washington area, like there is for the **Seabees** and others, and the second one was a museum. We hired Felix de **Weldon**, an outstanding sculptor who sculpted the Marine Corps' Iwo Jima memorial. I went to his place up in New England—he showed me a mockup of the monument he would propose.

Unfortunately, the monument appeared to get the first priority. The museum was supposed to have gotten first priority because it was much easier to deal with. Putting in a monument was a big problem.

So we frittered away quite a bit of time and energy on that. General Clarke was chosen to be the first president of the Historical Foundation. We began to make progress on a museum at the Humphreys Engineer Center near Fort Belvoir. We raised quite a bit of money from the industry to build it, but we lost a lot of ground when the decision was made not to put the Corps headquarters out there. Now everything is tied to the southeast federal facility, and that's still in abeyance-or in the background, at least.

While all this was going on, the engineer regiment was established at Fort Leonard Wood, and it dealt directly with the soldiers and had memberships. The Historical Foundation charter did not permit members, which maybe was not a good plan. In any case we soon found we had one group dealing with the military and one group dealing with the civil program, and that wasn't good. General Clarke tried, in 1989, to have them put together. General [Daniel R.] Schroeder, the first CG at Fort Leonard Wood, was lukewarm to it because he was so new. Two years later, I went to see Schroeder with General Clarke's blessing, and this time, the CG agreed to put them together into a new organization which became the Army Engineer Association [AEA]. The Army Engineer Association should be successful. It has a lot going for it.

People say, "Why do I need the AEA and SAME?" Well, SAME is a professional organization. It deals with engineering. The Army Engineer Association deals with the Corps of Engineers' family and **history**—the soldiers and the civilians, particularly the civilians, which we've not been able yet to attract adequately, but that's going to happen.

So that's what the **AEA's** about. The AEA represents the entire engineering family. The Army element of SAME is that part of the community which is professional. So it's a subset of the AEA basically.

That's the Historical Foundation's story. I do take credit for starting it and for assisting its being merged into the new organization, the Army Engineer Association, which was approved by the Secretary of the Army, and the Chief of Staff. So far, everybody's behind it.

The Corps is too valuable historically, and it's too important presently and for the future, not to have a coalescence of people who are interested in it.

The Army Engineer Association will give you that kind of a grassroots network if needed.

We'll have a museum, and someday we'll have a monument. Initially we must identify and credit the civilian personnel who have been so important in the Corps. The point is not to overlook the military, however. Communicating with the military is rather easy using the units, troop units, and the registers and rosters of retired military people. The civilian records are not that good, and actually, the Corps owes so much to its civilian people, it's got to take on the problem. We need some people in the civilian community to help us with that.

I didn't mean to say our civilians are more important than the military. It's just that the military is so much easier to deal with and attract to an organization like the AEA.

Q: Let's begin by talking about your retirement. You were extended three months because of the Israeli air base project until the end of September 1980. What was your retirement ceremony like?

A: As retirement approached, Ted Gay, executive, asked my wishes about a banquet, ~~dinner~~-dinner-dance, gifts, et cetera, for the occasion. I had the idea that formal affairs were not only expensive but somewhat inconvenient, and consequently many would not be able to attend. I really wanted to say **goodby** to all the folks at the headquarters, and this led to my asking to have a picnic for the employees and their families. That would be a fine farewell event for me. As for gifts, I told Ted I only wanted ~~one~~-whatever that was to be didn't matter but should not be very pricey.

With help from Bob Blakeley and many others, I'm sure, Ted delivered. I do not know how many came, but I was pleased so many did, especially the clerks and younger employees and so many children. The food, the weather, the games, and the program were just right. My gift was a battery-operated clock with my picture in a war bonnet on the dial. I still have the clock in my office and it runs fine-just like the picnic.

Previously, the change of Chiefs was a relatively simple event which occurred in the Chief's office or in a conference room. When I became Chief, the signal event, as mentioned, was passing the MacArthur Castles from General Gribble to me. We shookhands and that was it. He went home and I went to his desk.

During my term, the Corps of Engineers became a major command. Consequently, my retirement introduced a formal military change-of-command ceremony for the first time. Colonel Ted Gay, the chief of staff, arranged for the Pension Building, which was in the process of being modernized. This magnificent building was within walking distance of the office. General Vessey, the Deputy Chief of Staff, was the senior Army person present and represented the Chief of Staff.

The principals were on a dais and their families were in the front row. Behind the dais were flags representing all the Corps divisions and, of course, the national colors and the Corps of Engineers command flag. Several hundred attendees came from all over the Corps.

Mr. Blumenfeld was there from the secretary's office. General Vessey made brief remarks and then with help from the command sergeant major passed the colors from me to General Bratton. Then I made a few brief remarks and General **Bratton** followed. A reception at the other end of the Pension Building concluded the ceremony. Everybody seemed pleased. The organizers did a great job.

We had visitors from the other services, and later the Navy patterned a ceremony after ours. While the subsequent changes of command have varied somewhat, I think it's still formalized, because the U.S. Army Corps of Engineers is a major command.

You may recall my earlier comments that as I was leaving for the Pension Building, Mr. Jim McIntyre, the director of the Office of Management and Budget for President Carter, called and said, "Jack, go buy your new airplane."

That same afternoon my retirement parade was held at Fort Myer. This impressive ceremony included full colors, the old guard, the Pershing's Own, all the state flags, and, of course, the U.S. colors. A beautiful day. This was a Friday, as I recall. The preceding Tuesday I stepped into a hole and damaged my ankle. I stayed off of my feet until that morning and was able to do the parade. We made it all right, but it wasn't very pleasant. As I trooped the line of flags I stopped and talked to the young man who was carrying the Maryland flag. I needed a break about that time so that was a good way to do it.

Then there were a couple of unique aspects about the ceremony. The retiree is allowed to select the music while he troops the line. I had them play "Please Release Me, Let Me Go." A little bizarre, a little fresh maybe, but it was a song that everybody recognized, and you could hear the people laughing as the band started. I wasn't that anxious to leave, but my time had come.

Then Secretary Alexander presented the retirement certificate and made a very nice speech. I may have been the only general he retired during the time he was secretary, certainly one of a few. In any case, his presence was quite an honor to me and a sign of his respect for the Corps. Also, there were people present from the Congress. Anyone who's gone through the retirement ceremony finds it quite intimate and very personal.

Gerry was recognized. She received the wife's retirement certificate and a bouquet of roses. After the ceremony we had a small reception. That was the end of it. I was almost through. I went home and the next morning when I got up I wasn't in the Army anymore.

Of course, getting out of the Army involves a lot of administrative details, but the Army staff and the good people at the Corps made it all very easy.

So my leaving the Corps was pleasant. It fills your ego for a short while. Many people asked me if I was sorry to leave. I rationalized that I'd had over 37 years in the Army and I'd done all the things that I could have ever expected to do and more. I'd had my crack at being Chief of Engineers, and there was no other place to go for me in the Army unless something unusual would happen, which it didn't. My time was up. I'd been in the Army longer than most people are allowed to stay based on age or total service.

My only regret was leaving unfinished a few things I had begun. The reorganization of the headquarters was principal in that regard. Also, I could have used another month on the Israeli airfield thing, but it wasn't necessary. The real regret was a feeling that I'd reached the peak of productivity and could accomplish more and make decisions easier than at any time in my career.

On the other hand, I was anxious to try my hand at something new. I had accepted a position in a major international construction company as the director of international business. The company was headquartered in Rotterdam, Holland.

Q: Your successor as Chief of Engineers was General Joseph **Bratton**. Could you talk about the choice of the next Chief of Engineers and what role the sitting chief plays in that selection process?

A: Well, as discussed earlier, the process to select the Chief of Engineers is spelled out fairly carefully. A board of five generals, including myself, all senior to anyone eligible to be selected was chaired by General John **Vessey**, then Vice Chief of Staff.

We considered all colonels and higher and selected the three candidates considered best qualified in our collective view. Major General Joseph **Bratton** stood alone at the top. He was ultimately recommended to the Congress by the president. As a matter of interest, age was a deciding factor in the case of several excellent major generals.

There was an interesting story associated with selecting my successor. Keep in mind General **Bratton** had spent most of his career in the nuclear business and was less well known than others in the Corps during the mid-1970s. Commencing 1 July 1976 and into late 1979, there were four leading candidates whom I had begun to consider: Major General Richard E. McConnell, division engineer, North Pacific Division; Major General Carroll **LeTellier**, who was division engineer in Atlanta; Major General Charles McGinnis, director of Civil Works; and Major General Wesley Peel, commanding general of Fort Leonard Wood. By late 1979, steps had been taken to add to General **Bratton**'s Corps experience. You have to understand, the Chief of Engineers only gets one vote on this, but because he knows these people so well, his recommendations are respected. Every one of those four generals had to leave the service before I did and therefore were not available. McConnell had serious health problems. **LeTellier** had had surgery, which wasn't prohibitive but it did lead him to retire earlier than expected. McGinnis decided he needed to undertake another career for a variety of reasons. Peel's father was tragically killed in an accident in Texas and he felt that he had to retire and go home for family reasons. So those four candidates were removed.

Fortunately, a couple of years earlier General **Bratton** had returned to the Corps and was rapidly becoming reacclimated to Corps operations. Harry Griffith, an outstanding general who was well trained, had just been selected for promotion to lieutenant general to fill a key position in the Defense Nuclear Agency-a job for which **Bratton** was exceptionally qualified. There was some discussion whether or not it would be better to try to switch him and Griffith for the Army's benefit; however, the die had been cast.

The only other consideration that I recall was should we bring in a lieutenant general as opposed to promoting someone into the job. There was one truly outstanding lieutenant general who would have been a great Chief of Engineers. Still, everyone was happy with **Bratton**, and there was an advantage to promoting someone up to the job. One of the reasons why generals are retired relatively early from the Army is so others can move up-not laterally.

Q: Did you have an opportunity-I guess informally, rather than formally-to pass on some advice to General **Bratton**, any major points that you wanted to make?

A: I have to say I think I passed more advice on to him than General Gribble did to me, but remember that I had spent over three years working closely with General Gribble. Here's what we did with General **Bratton**. When he emerged as a potential candidate for becoming Chief, we made some assignments rather quickly to increase his Corps experience base. First as the

South Atlantic Division's engineer in Atlanta. Shortly after that as the deputy when General Johnson retired. So in the course of a couple of years, he had two important exposures-division engineer and deputy chief.

While deputy, he and I spent a lot of time talking together, and there were some specific suggestions. The thing I tried to emphasize to Joe was he had a great staff and the Corps was made up of good people, so he should give the authority to the people who work for him and let them do the work. Also, unless he had some reason to change or modify a staff recommendation, he should accept it. Otherwise, the paperwork would kill him. The other thing I mentioned was to keep the OCE organization that was being put in place on track. In that, I did suggest something about keeping the ACE's shop small and staff oriented and getting the director of the Engineering and Construction Support organized with the top civilian in charge.

The other point I recall mentioning was the hazardous waste program. Joe was a little concerned about taking on that mission because he felt the Corps wasn't properly trained to do it. Well, neither was anyone else, and besides, the Corps could do it better, so I felt he should try to land that Superfund program. Which he did.

You know, I'm not a great believer in passing advice to your successor. One should answer questions if asked. As a matter of fact, I never believed in overlaps. Everybody has to arrive at his own conclusions on what he's going to do.

You may recall that back in our earlier discussions I had the good fortune of having been in OCE for four years after having been in a Corps of Engineers division. I knew what I wanted to do when I took over, but even so, I had to sit in that chair for a little while to get the-to really grasp the breadth of responsibility and authority. After you've done that, whatever somebody may have told you probably has been forgotten.

In summarizing the period from 1976 to 1980, I believed the Chief of Engineers' primary role was to be a practical visionary who stayed in close communication with his people and represented them and the organization with deep pride and respect. Respect for the Corps' illustrious past, which when combined with pride in the quality and capability of the men and women under his command, provided him the confidence to defend the Corps and to seek aggressively new and challenging roles which ensured a solid future for the organization. I personally never doubted that the Corps would respond to any challenges. In fact, I sincerely believed one of the two ways to weaken the Corps would be to fail to change when necessary or fail to grasp new opportunities as they arose. The other, more insidious threat would be to weaken the ability of the commander to command. History has shown that the transfer of the command-and-control mechanism into the hands of those who do not have direct control responsibilities for the people and the mission is a more dangerous and ultimately fatal trend.

This process had been in the works only about seven years when I retired and at that time seemed under control. I am afraid the process is now somewhat out of control and worsening. It needs to be reevaluated and reversed quickly if appropriate.

Answering the Army's need for good facilities for its soldiers and their families, new or at least well-maintained support activities for the Army's equipment, and strengthening our national defense is the Chief's primary responsibility. All else leads to the fulfillment of the Corps' mission as part of the U.S. Army. Public works, albeit of great positive value to the nation and a steady demand on the Chief's time and attention, is in its best sense a source of



General Morris, outgoing Chief of Engineers, introduced Major General Joseph K. Bratton, incoming Chief, to Senator Jennings Randolph (D-WV), in September 1980.

especially well-trained and talented engineer personnel in case of full national mobilization or when needed to respond to national or international military needs or emergencies.

The responsibilities of the Chief of Engineers, while great, were distributed among a strong staff with excellent credentials. My most pressing personal responsibility involved dealings outside the organization-the White House, Congress, state and foreign governments, public and professional agencies, and of course DOD and DA.

As a final thought, I thoroughly enjoyed the job and looked forward to going to work every day. You cannot beat the work or the fine people who helped get it done.

Q: How did you rate yourself on achieving the goals which you outlined at the beginning of your term as Chief of Engineers?

A: My appraisal is probably about a "B." Significant developments occurred in each.

Stay in Business "A." We did stay in business in spite of several serious challenges. Our position with the White House and the Executive Branch strengthened during the period.

Support the Total Army "A." The most significant effort brought forth many attractive initiatives in the environmental, energy, and maintenance fields. Support

to facilities engineering by the Corps districts (one stop shopping) was singularly successful. Mobilization efforts assisted the Army staff. Becoming a major command allowed the Chief to meet directly with the Chief of Staff of the Army and his commanders. This goal must remain in some form. This is the Corps' bedrock criteria. 1976 to 1980 showed good progress and momentum increased, but there is always more to do and keep doing.

Support the Nation "B." Sister service relations were excellent and constructive, but meaningful relations with other federal agencies-Department of Energy, Department of Transportation, Department of State, et cetera-were disappointing, possibly excepting EPA. International work thrived. The Corps' professional presence was apparent in China, Israel, Egypt, Saudi Arabia, Russia, and others. The Corps' role in environmental matters stabilized as the public works program was transformed into regulatory and O&M.

Get OCE out of the Operations Business "C." Good progress which allowed headquarters to deal with crucial external issues and concentrate on the first three goals more thoroughly. At the same time reorganization of the headquarters was initiated but not finalized, leading to problems after 1980.

Post-Retirement Career

Q: Turning to your retirement career, then, as a retired Chief of Engineers you must have had a lot of options about what you could do. How did you sort through those and decide what to do?

A: First off, I had no magic equation that I plugged into. I did give thought to the areas where I could be of some value. My father had been a very good businessman, and I learned a lot by association with him. There is a difference in working for somebody and working for yourself. My father believed that it's always better to work for yourself, even with a small business, than to work for someone else.

I like that thought, and another factor was the field of effort. Many Corps retirees do well in engineering companies. My attraction was toward construction.

We didn't want to move. Gerry and I liked it in the Washington area, and we would have moved for the right job but we didn't particularly want to. We refused one job which was extremely attractive because we had to move. We owned our home, and this was our "headquarters" area. I'm from Maryland; she's from North Carolina.

I asked myself how I would explain taking a job with a company that had previously worked for the Corps, and also why I chose one of them over another. So I finally decided not to go to work for anybody who had worked for the Corps. At least, not immediately. That was naive, I expect, but I made the decision and that eliminated many good prospects. It turned out that a week before I retired, I was asked to be the director of international operations for Royal Volker Stevin-then the eleventh largest construction company in the world. The effort was mainly in dredging, a field I was pretty comfortable with, plus a lot of roads and ports, which I liked also. They offered me a very nice salary. It was less than I might have gotten from some of the American companies, but the benefits were especially attractive. Also, I would be the senior American---or non-Dutch person in the company.

They said, "You can stay in America, but we want you to come over here once a quarter to our business meetings. We also want you to look at the international scene. You can do that from

there as well as you can from here.” They financed us to set up an office here in Washington, which I did. That worked out very nicely. It was a fine job. It gave me a chance to get my feet on the ground in the construction business and also gave me an office of my own which later facilitated the transition into working for myself.

I was successful in getting new work, but fairly soon I became a troubleshooter for problems in contracts using American money. I was sent to Yemen a couple of times to help straighten out a **USAID** project. The claim was over \$100 million, so it was a big exercise. Yemen’s not the greatest place in the world. As someone joked, “It’s not the end of the world, but you can see it from there.”

Then there was the Zilwaukee Bridge in Michigan which had failed. The Dutch were great engineers and business people, but the labor situation up in Michigan presented them with many unfamiliar problems. Ultimately, at my urging, the contract was terminated for the convenience of the owner, allowing our company to withdraw from the job successfully.

There were also efforts on the Miami People Carrier and the Baltimore Harbor Tunnel projects.

I hired an ex-Corps colonel, Jess Baldwin, to help me. Right after Thanksgiving 1980, two months after opening the office, I was called from Rotterdam by the principal who hired me. He indicated that for the first time in its history, the company incurred a big loss. I suggested that might mean they would not need me anymore. He said, “No,” and they kept me.

The international business had to be put aside while they straightened up their internal problems and kept their home base work solid. That’s when they put me in the troubleshooting business. Even so, I was not fully engaged. I was asked to stay at least another year and told I could do other work so long as I was available when they needed me. That was really very nice of them. By my second or third year I had met many people in Holland and formed, informally, a company called Holland-American Industry Group with a friend over there. He searched out companies that needed representation in the United States, so in the course of a year or two I was representing about eight or nine companies from Holland. Finally, when I was disengaged from **Volker** Stevin we had a solid business in place.

That business included some work with Royal Dutch Shell, and this led to a real business adventure. Royal Dutch had a nondestructive procedure for testing pavements. The Corps of Engineers used a vibrating process that was good but very cumbersome, while the Dutch equipment was small and easily shipped. You could tow it behind a car or Jeep down the runway or over the highway.

Royal Dutch Shell wanted to export that process to the United States. Dr. Matthew Witzak, at the University of Maryland, was a leader in the asphalt and pavement business and a consultant to the Dutch process in Holland. He and I began to work together trying to export or set up its company, Pavement Consultancy Service [PCS]; in the U.S. The Royal Dutch people had a wholly-owned Dutch company in New York called Scallop which financed the startup of PCS, United States. Scallop personnel didn’t want to get involved directly, so they contracted with my new company, J. W. Morris, Ltd., to organize the project. I was hired as the manager, and they paid J. W. Morris, Ltd. for all personnel and administrative support.

That expanded our office. I had already hired Jess Baldwin and another ex-Corps major, Tom Donnelly, to help, but PCS pushed our office staff up to about 20 people. Tom was promoting this product rather aggressively, but all of a sudden the main company back in Holland decided they wanted to get out of the business. They sold PCS, and immediately I was told by

the people in New York they were only in this because they were told to by the people in Holland and that I was to get rid of the business.

By this time, Matt and I had become very much involved in the activity. So I went to New York and bought it myself. I became the owner of an engineering specialty company, one of my exciting endeavors. Subsequently, Witczak became part owner. He was the real technical brains of the company and had assembled a group of smart, ambitious graduates of the University of Maryland. Ultimately, we sold it to Law Engineering of Atlanta.

In the PCS process, Dr. Witczak asked me to give a series of lectures on management at the University of Maryland. Ultimately, he asked if I would help develop a course of instruction in construction engineering management. I agreed and became a member of a committee headed up by Mr. James Clark, the owner of Hyman Construction and Omni Construction. Clark is a regent and put up half a million dollars, as I recall, of his own money and another half million in matching funds, which generated a million and a half dollars to underwrite the chair and this program. I was the deputy chairman and did most of the course organization work and wrote the scenarios. We ran our paper up to the president, and it was accepted as written.

At that time it was all pro bono. It was just an interesting exercise. I was then asked to organize the course while a chair professor was sought. From the aspirants they selected an individual from Georgia Tech, and he agreed to take the job. Then I was asked to begin collecting the staff and get everything ready because the chairperson could not arrive until late summer and the course was to start in September.

Lo and behold, about the middle of August the selectee announced he could not accept the job. I was asked if I would take over the chair duties as acting professor. So that's how I got to be chair professor at the University of Maryland for about three years. That was going on while we were marketing PCS and while I was representing several overseas companies including Partek, a Finnish company that was in the construction business. I have enjoyed immensely working with Partek. Two other Finnish companies were in our fold, also. So we had a fairly big program going. We had hired Tom Donnelly, as **mentioned**, plus the four engineers out of the University of Maryland. Also retired Colonels Bob Bangert, Al Costanza, and Max **Imhoff** were helping. Later, Clay Meyers, Captain Meyers, USN [retired], was employed to expand our civil engineering services to include operation and maintenance.

In 1985 J. W. Morris, Ltd. was fairly busy. As I say, we had about 20 people, we owned the pavement testing company, and we were representing a group of foreign companies. None of these were competing with each other, **and—**

Q: And you were teaching.

A: And I was teaching at the University of Maryland. That became a problem, incidentally, because it ties you down. My wife told me when I mentioned the opportunity to teach, "Jack, that's going to tie you down too much," and that was the only comment she made. I decided to do it because it had other benefits.

Anyhow, we were going well-the **financials** looked good, the people were fairly happy and had a good retirement plan and benefits, et cetera-except the teaching was tying us down as Gerry had predicted. Then one day Dr. Witczak asked to move PCS from my office closer to him at the University of Maryland. So we agreed but kept a liaison in Arlington. I offered some of the released space to the Water Resources Congress. Joe Tofani had been running WRC and had just stepped down. So they moved in with us with Ray Leonard in charge. I continued as the chairman of PCS.

At that time, I began to concern myself more with these companies we were representing in the United States. We were up to about 12 from Europe and some from other areas. Also, I had been to China twice to teach school and had some contacts in China. Saudi Arabia had gotten to be important because of my background and new associations with a firm in Saudi Arabia. The pavement business was attractive in Saudi, so I began going back and forth again to Saudi Arabia. Our international base had grown, and we were really spreading out quite nicely.

Then out of the clear blue sky I got a call one day to go see Mr. John **Toups**, chairman of Planning Research Corporation headquartered in McLean. John asked me if I'd help him find somebody to take over the engineering group which was, at that time, the largest engineering group in the United States. Its companies included Frederick R. Harris, Consouer Townsend, Environmental Management Incorporated, and Planning & Development Corp.

So I sent resumes to him on several candidates. I really tried to get Mr. **Toups** to take John Wall, even though John wasn't going to retire from the Army for six or eight months. Finally, I told Mr. **Toups** I didn't have anyone left to suggest. He said, "Well, why don't you take it?" By this time I figured I would be too old and also I felt he wanted to sell the engineering group. He promised me he would not put it on the market for a couple of years.

I then told Mr. **Toups** about my company business, and he offered to buy it. I should have sold it, perhaps, but I concluded I might not be with PRC very long, so I had better not abandon J. W. Morris, Ltd. so soon. To eliminate any conflict I formed a new company called Engineer Management Services, Inc. [**EMSI**], Ltd. Captain Meyers became the president of **EMSI** and I sold all the J.W. Morris, Ltd. work to **EMSI**.

As events developed, PRC was sold within two years anyway. It wasn't put on the market; Mr. **Toups** lived up to his word. He received a very attractive offer from Ashland Technology Company [ATC], which owned DMJM, Holmes & Narver, and Williams Bros. Company in Tulsa. I was out of a job. Al **Dorman**, who was the chairman of ATC, certainly wasn't going to give me his job, but he asked me to be his assistant.

There was still some engineering work being done in PRC, and I was kept on as the engineer for two years. I wasn't out of a job completely, but it was just a matter of time. I was also allowed to work for Ashland on an hourly basis up to **50** percent of my time.

During the 1987 SAME meeting in California, I received a call from Governor Bellmon of Oklahoma, whom I had known for many years. He asked if I could prepare a proposal for the state of Oklahoma to submit in the superconducting super collider competition. He asked me to think it over and let him know. I said, "I will call tomorrow and tell you if I can do it." I talked to Mr. **Dorman** and his people, who happened to be at the SAME in San Francisco and found out that DMJM and Bechtel had a team of people who had worked on a similar study and could be made available if Oklahoma had a site. Most states had been working on the project for more than a year. We only had three months to get Oklahoma's report together. So, to make a long story short, I accepted that task. J.W. Morris, Ltd. was back in business all of a sudden.

EMSI was set up as a company to have the contract with the state of Oklahoma to perform the study and I was the technical adviser and overseer and Chuck McGinnis was liaison with the Governor's office. Structurally it was sound, and Bechtel and DMJM were subcontractors to us. We put together a very nice report on time.

My work at Ashland continued also. So that whole period from about 1982 or when Volker Stevin began to go down, until, oh, 1989, we were just very busy doing a lot of different things. The significant ones I mentioned. We no sooner finished the super collider when Ray Leonard, who ran the Water Resources Congress, was asked by the Trade Development Program if WRC, as a nonprofit organization, could do a study of the water transportation system in Bangladesh.

I happened to be the chairman of WRC at that time. Ray was the only active person in WRC. So he asked me, and I said, "Yes, we can do it. I'll manage it." So we did that. We put together a team. We did a \$1 million study for the Trade Development Program of the State Department, and it was quite successful, I thought. WRC established itself as a competent organization to do engineering studies. EMS1 was now recognized; WRC was recognized.

We found a great team for the Bangladesh job. General Jimmy Johnson, who had been deputy chief, was in charge of the field work. Jim organized the group that worked in Bangladesh. The results were impressive, and the WRC made a good impression on the World Bank.

About that time, I began working as an engineering adviser to Seltzer and Rosen, which was a law firm. Our thrust was to avoid claims. I've been working for them now for over four years.

So my retired career has been rather varied. I've left out a few things. I stayed active in PIANC and in **USCOLD** [U.S. Committee on Large Dams], and I became very involved with the Corps of Engineers Historical Foundation, which is now combined with the Regimental Association into the AEA. The AEA is important to the Corps. We need to have a grassroots organization of alumni and active-duty people in the Corps for a lot of reasons.

Then I've stayed very active in the Military Academy at West Point. I will always feel that I owe the Academy. My class gave a \$1 million gift to the Academy, a new main entrance facility. I was the chairman of that committee. It took from 1981 to 1993, a **12-year** job, but we did it. We did all the concept engineering ourselves. We hired Bums and Roe to do the detail work, but all of the planning, the concept, the contract management, and the supervision of the work we did ourselves. I think the overhead was about 1.2 percent, but we put days and months and years of our lives in that thing.

Last, there is the National Academy of Engineering. I have served on the Building Research Board and have been involved in several studies over the last five-plus years. Presently I am on the Water Science and Technology Board [WSTB], which uses my experience nicely.

All in all, I've had a lot to do, and I guess it breaks out pretty much even into pro bono and paid. I really have been very pleased with the opportunities I've had since I retired. I haven't done as many significant things as others perhaps, **but—**

Q: I wanted to ask you about the teaching in China.

A: While teaching at the University of Maryland, I began to realize that the Chinese were going to do their own engineering and that they wouldn't mechanize as we had. The one area I thought we could help was in management of projects, organizing and conducting project management.

So I was able, through the University of Maryland, to get the East China Technical University in **Nanking** to set up an exchange. They invited us over **to** teach a course in construction management. Because of my Army background, I went **to** see General Richard Stillwell [retired] in the Department of Defense. He was involved in the international matters for the Secretary of Defense and became quite attracted to the idea. So I carried a Corps of Engineers

flag in one hand, the University of Maryland flag in the other, and took with me Dr. Mark Smith from the University of Maryland's construction engineering and management course. The three-week program went well and was underwritten for the following year. The next year the Corps provided Colonel Steve West, district engineer in Omaha, to fill my spot. The idea was that from then on the Corps of Engineers would become the prime mover in teaching engineering management to the Chinese. My belief was if we could get that done, even though the Americans may not get the construction contracts, the American management system would be adopted, out of which would come many benefits for the American construction industry and U.S. suppliers.

I didn't have enough power to keep it going. I just couldn't drive the thing hard enough. The Corps supported it the first **year**—the University of Maryland and the Corps together—but, as I say, I didn't have enough clout to keep it going. It's too bad because it had taken a yeoman's effort to get started.

Q: Were there classes in English or did you have a translator?

A: I had to use a translator. That was a major weakness.

Q: In retirement you've been, as we talked about last time, very involved with the University of Maryland. What about other academic institutions that you've been involved with?

A: My experience in construction management led to my being invited by quite a few universities in the United States and abroad to lecture on management and leadership in the engineering and construction field. I felt there was value in passing on to future engineers and managers important lessons that I had learned.

Now, besides the University of Maryland and the lecturing business, I also was asked and accepted a position on the board of advisors to the dean of engineering and mathematics at the University of Vermont. I have no affiliation with Vermont, but I know some people who do and they recommended me. I was accepted. I am happy that I did so. I've been working with them for about four years now.

The other area of academic activity **has** been the Association of Graduates at the Military Academy. While the Association of Graduates is not involved directly in academics, it is very much involved with all the activities at the Military Academy. Since that was my alma mater, I was delighted with the election to the board of trustees of the Association of Graduates and have been on that board for almost nine years. My term expires in the summer of 1998.

The Association of Graduates takes considerable effort—I am the chairman of a couple of committees, I've served on several others. I try to stay active because I think it's important that graduates of the Military Academy maintain a voice in the affairs at West Point, particularly those where the superintendent needs to hear from the alumni. The Association of Graduates does not function like an alumni group of most universities; however, it does have somewhat the same interests.

The Military Academy, a federal organization, is regulated by law and the military department; therefore, there are some distinct limits on the Association of Graduates. Nevertheless, the association does keep in contact with the students and cadets and has provided me with an opportunity to lecture to the cadets on management and on engineering, specific engineering problems. That became another facet in my association with academia, but if my background and experience are of value in the educational field, then I'm most anxious to offer it.

The University of Maryland paid me as a professor, but the lectures and the boards of the University of Vermont and West Point are not remunerative. In fact, they rarely pay expenses, but that's not the point. The reason I mention the **financials** is that it does distract from the things I do that generate money, which can be used to do the nonpaying work. So, as long as I can, I'll continue to participate in passing on, within academia, experiences and lessons I've learned. I see a need to develop leaders, not only of engineering but engineers who take leadership positions in government. We're not as well represented as we should be, and unfortunately many of our major construction companies are being managed by nonengineers.

Q: We discussed a little bit your involvement in other professional organizations, but I think there are several we haven't talked too much about, like PIANC and **ICOLD**. You've continued to be involved with professional societies, as well.

A: Well, yes. My experiences and associations while in the service with professional engineering organizations supported the logic of retaining my association with them. PIANC is one of my favorites. It's not an organization of people so much as it's an organization of countries, and therefore it's a very pleasant annual event when you go to the meetings and, every four years or so, to their congresses. You're really the guest of the country.

Aside from the social and the pleasantries aspects, the professional features are very good because PIANC is truly an outstanding professional organization. It's the oldest continuously operating professional organization. Its **50** country members are represented by individuals who are in important positions either in government or in the educational field in the area of water transportation and affiliated structures.

While the United States has the largest individual membership in PIANC, it also has one of the weakest organizational structures. That's been overcome in the last 15 or 20 years because of some good work by a few people. Dwayne Koch, the U.S. PIANC coordinator under the director of Civil Works in the Corps has kept PIANC activities in front of the membership and encouraged them to become more active. The U.S. has maintained a leadership position in the international **organization**—General Casey in the **1940s**, General **Holle** in 1951, General Heiberg, **Thordike** Seville, to name a few.

One other thought on PIANC. I was elected as one of the first four international vice presidents. For years, there were no international vice presidents, but as the organization got bigger it became more difficult for the president to manage it. So the organization was redone, and Sir William Harris of Britain and I worked on that task. I was very pleased with having had a part in it, and also the results have been **quite** rewarding.

One interesting event occurred in the first year I attended in Sicily in **1972**. We were so much in the environmental program back in the United States, and I made a motion that a commission be established to evaluate the effect of navigation structures on the environment. I did not get a single supporting vote outside of the U.S. delegation. No one felt the subject was sufficiently important to establish a commission, which means a four-year study.

The next year we had a congress in Ottawa, Canada, and early in the affairs the leader of the Russian group to PIANC came to me and said, "If you'd move again to establish a commission to evaluate environmental effects of navigation, our delegation will support you." So I boldly stepped forward and made the motion a second time. It carried unanimously. In the course of one year, something happened. In any event, PIANC became active and remains an active exponent of the environmental impacts of navigation structures.

Beyond PIANC, the large dams groups, **USCOLD** and **ICOLD**, were important professionally. I wanted to be a voice for the Corps in a different sort of way in these professional

organizations. I always felt some engineer officer should be good enough to be on the exec committee of **USCOLD**. That's never happened to my knowledge. They make the Chief of Engineers an honorary member, and I think that's so he can't have a voice on the exec committee. They also make some other people honorary members. On the other hand, the Corps has always been very well represented through our family of outstanding civilians. We've had several who ended up as the president of USCOLD-Lloyd Duscha and Dick Armstrong recently. I always felt that there was in the Corps of Engineers at least one officer of some rank who was technically qualified to be nominated for and make it to the exec committee, but it hasn't happened to date.

I became chairman of the Environmental Effects Committee of USCOLD and was responsible for the environmental program at the ICOLD conference in San Francisco in 1986. The previous International Committee on Large Dams' meeting in Europe was harassed greatly by the environmental group, "the Greens," they call them. We didn't want that to happen in San Francisco, especially since there was an environmental group meeting at the same time at Berkeley on the rain forest problem in South America. Several of us went to their meeting, which included some interesting presentations. The author of *Cadillac Desert* was a principal.

Q: Mark Reissner?

A: Yes, Mark Reissner. I had not seen him since his book was published. While the book was very critical of a lot of things and a lot of people, it was not critical of me personally. I wanted to let him know I was present because I was interested in having some of those present at his meeting attend a joint workshop at the ICOLD meetings.

The joint meeting at ICOLD was a little stormy, but still it was managed-and came off pretty well. Unfortunately, shortly after the congress, I had to ask to be replaced as chairman of the Environmental Effects Committee because of personal problems-well, not problems. Gerry had a hip replacement, and I just didn't feel that I could do all the running around at the time, so I asked Lloyd Timblin of the Bureau of Reclamation to take over. He has done a great job since then.

Having been a past national president and having recommended and financed the annual sustaining member award, the Society of American Military Engineers [SAME] still attracts much of my time. It deserves it. I try to go to all the annual meetings. Both Gerry and I enjoy seeing so many friends. I take some pride in the results of energizing the sustained membership in 1976. SAME climbed from 250-300 sustaining members to about 3,000, and that's really been the injection of talent, knowledge, and leadership that's made the SAME so much more attractive to the young engineers, civilians as well as military.

I don't know how to say enough for Walt Bachus's leadership and good work. He changed SAME from mostly a social outfit with a rented downtown office into an organization that's quite active in the technical field and owns its own fully paid-for building in Alexandria. SAME puts on a great annual meeting. I've been urging them to have annual meetings in Washington so the sustaining members can get direct input from the Congress and the leaders of the country. In return, our engineering talent needs to be seen and heard more. That goes back to the idea of having better engineers in leadership positions. I think SAME can be a factor. Having the annual meeting in Washington will cause improvement in that field. Actually, the annual meeting should be in Washington-it's a national meeting-if not each year, then every third or fourth year.

Then there are the water organizations. Actually, there are about three of them. I was the first president of the National Waterway Foundation. It was set up to provide grants and not to be outwardly active. We published a book called *Waterway Productivity*. It's a good book. The National Waterway Foundation is a passive sort of organization. It does not have members.

The Water Resources Congress, like so many water organizations, is having a hard time because the interest that supports it has been moved into other areas. Business can't support too many organizations, so it's a challenge for the Water Resources Congress to find a new field to supplement its previous areas of grandeur.

The other activity that's taking a lot of time is the Corps of Engineers Historical Foundation, now the Army Engineer Association, which was covered earlier.

Q: You've also been involved with the National Academy of Engineering, too, isn't that right?

A: Yes. The **Academy**—I was honored by election to the Academy in 1977, and for the first several years thereafter I was not involved too much. About six years ago I joined the Building Research Board of the Academy. The Academy has boards and committees. Normally there are two or three members of the Academy on a committee and the remaining members serve from industry based on their professionalism and desire to service the Academy.

The Building Research Board is financed, in large measure, by the Federal Construction Council, which is made up of the federal agencies involved in the construction business including the Corps, the Navy, the Air Force, the Smithsonian, the State Department, the Postal Service, the General Accounting Office, et cetera, et cetera.

Service with the Academy is another effort to return to society some of the lessons learned at public expense while in the Army and since I retired. I've enjoyed my activities in the Academy. As I said earlier, I also serve on the WSTB. A current WSTB study concerns flood protection for Sacramento.

The Building Research Board has looked into the responsibility of the architect-engineers in the construction phases of contracts. Previously the board published a report on the value of inspections to quality. We analyzed the need for mega-projects and if there could be **mega**-projects in the future because of the constraints from environment, funding, and local cooperation, et cetera, for major projects. Could we put a man on the moon? I think the super collider is probably evidence of the problem because it's now been stopped, not because of the project itself but because of financial considerations.

All the pro bono effort when put together adds up to about a third of my time, at least three to four months a year spent doing things that are directly related to passing on knowledge, if you want to call it that, or to repay an obligation to my benefactors through the contributions of my knowledge and experiences.

Q: Recently the Army Engineer Association has taken up a bit of that time.

A: Yes, that's been a great demand lately. I was the originator of the Corps of Engineers Historical Foundation. I was on the board and later the chairman at the very end. The Army Engineer Association is important to me because of my role in getting the structure, the charter, and the bylaws taken care of. I asked not to be put on the new AEA board. On the other hand, President Chuck Fiala did ask me to be chairman of the Policy Committee. Once all this levels out, my role will be to try to market the considerable value of this association.

When I get to the point where those extracurricular things seem to be more important than the consulting work, I'll retire like everybody else does.

Q: I was going to ask you that. Is there any thought of “retiring” again?

A: Well, yes. I think of it frequently, and it depends on the personal situation. Unfortunately, Gerry’s had a lot of problems the last five or six years with arthritis, and as I mentioned, her hip replacement. Besides, she’s had both corneas replaced in her eyes. Those were serious operations. She’s had three operations on her foot to try to eliminate the pain when she walks. Also she’s had one joint in one finger, her index finger on her right hand, worked on. So I’m hoping that after this current surgery she’ll be mobile, but we’re reaching the point pretty quick where I think we should devote ourselves to each other. Still my work gives us diversity. It allows us to travel some, which we otherwise might not, but there’s no question where the priority is. The priority is at home. When I have to choose, that’s where I’ll go full time. Also, as an individual I am becoming less attractive in the business arena. You asked did I ever think about it. Yes, I think about it a lot. Gerry and I have pretty much agreed that as long as I can continue to get around and do some good things and as long as she’s healthy, our present arrangement is best. She wouldn’t know what to do with me at home anyhow.

She spends most of the summers in North Carolina at our beach place where I have a fax machine, a copier, and so forth. I can do my consulting and board work from North Carolina as well as here in Virginia. Helen Sari, my secretary, keeps my local office open and handles the administration. I fax letters for her to type, et cetera. She is a wonderful person who has become a good friend to Gerry and me.

Q: Have you found in the last few years that you’re doing more pro bono work?

A: Yes. It grows and grows. I had a very good friend who retired as a flag officer and his policy was not to do anything he didn’t get paid for. That’s okay. If you do that, you’re probably going to make a lot more money. My feeling, as I mentioned a couple of times, is slightly different. I just felt that I could be of value to the future by putting my experiences to work in fields which often are of a pro bono nature, like the Academy of Engineering, the Association of Graduates, the University of Vermont, and so forth. Of course, the water organizations. That’s my background, navigation and water, so I serve on them, and it’s a labor of love. There’s no altruistic objective there. So as time goes on, it seems that I’ve gotten more committed, but I think that’s going to change because next year I am also going to curtail my activities with the Academy of Engineering and the University of Vermont.

To answer your question clearly, I believe when I first retired I was so interested in finding an occupation that I didn’t pay much attention to the pro bono work. Then, once I settled in and became comfortable with the fact that I was going to be able to survive financially, I began to do more and more pro bono work. It’s now reached a peak probably, and it’ll wane in the future. I’ve enjoyed the effort, don’t misunderstand me. It’s not a one-way street, and I have no regrets in any way. I wouldn’t want this record to reflect I have. I’ve enjoyed the pro bono work, and I’ve met some wonderful people. I am not sure a person can make more money if he avoids pro bono efforts. Actually, some of my consulting work has resulted directly from my exposure at the National Academy of Engineering.

Q: Looking back over the 16 years of your retirement, you’ve been involved in a large variety of activities and projects and various kinds of work. Perhaps we could wrap up this segment of the interview by summarizing the types of activities you’ve been involved in during the last few years.

A: I would say that the first general comment is I was interested in being involved in a lot of things. I just think that’s my nature. The higher I went in the Corps, the more I enjoyed my

work because I had broader areas of responsibility and I seem to do better when I have a lot of irons in the fire, instead of just one thing. I'm not a specialist, I guess, by nature. So when I retired, my first priority, as I have just mentioned, was to find a job that sustained my income equivalent to my service income plus a little more. So the startup was basically to double my retirement income.

The next area of concentration, I would say, would be in the professional organizations that related to my work and to my past. That brought in the water resources and environmental activities, the professional organizations like the military engineers and civil engineers, **USCOLD**, **PIANC**, and then, finally, the Academy of Engineering. Somewhat overlapping the second group were just the pro bono things that I do like advice to the University of Vermont and the Association of Graduates of the Military Academy, lecturing at various places, the Army Engineer Association.

The main thing is that I'm really doing the things I like to do. Occasionally I'll get a contract with a firm to do something that I end up not feeling too comfortable with, so then I usually tell them that they should drop me. I've done that two or three times. So that's how it breaks out. The job, then the professional societies, and finally the pro bono things. That's the sequence.

Q: What about your relationship with the Corps of Engineers since you've retired?

A: Basically you're asking about the official relationship or business relationship. Well, the field that I've chosen to work in since I retired is a field in which the Corps is also quite active, i.e., engineering and construction. I have felt constrained by law and also by my conscience that I should not promote a company which employed me with the Corps of Engineers. I never did that. The first five or six years I had little or no association with the Corps in any way except socially. General **Bratton** and General Heiberg continued a practice that had started with General Fred Clarke, and that was to have lunch about once a month with the previous Chiefs and just talk about things. The Chief has a pretty lonesome job and needs somebody to talk to. Other than that, I didn't see much of the Chiefs. The current Chief never needs an old Chief of Engineers poking around or telling him how to do his job. I went to the Christmas parties when I was invited, and I went whenever possible to the update that the Chief gives to the retired people.

I explained to the people who employed me they could not expect me to promote them to the Corps. One very large local company became quite upset that I wouldn't try to get work for them. I refused to do that and asked that my contract be terminated.

Exceptions arose when I found the Corps was being criticized or heading into trouble in an area. For example, district engineers or contracting officers are accused of not talking to contractors. That led to general comments that the Corps is hard to work with, is unfair, or whatever. So when I'd hear things like that, I would make a point of enlightening the Chief.

On the other hand, I always wanted to be available to the Chief in case of any problem. General Williams has been a little different from General Hatch, as I recall. General Heiberg was similar to General Williams in one sense, and that was if he had a problem I could help him with, he'd call me, and I like that. Later, more recently, however, I've been a lot more involved with the Corps, particularly through the Academy of Engineering. I've known General Williams personally since Vietnam. He's easy to talk to-a very fine man. So I probably am a little more active today.

Of course, as time goes by, your constraints lessen, and you're no longer a factor in Corps policies. I think retired Chiefs can be of value to the Corps. General Clarke certainly was a

great help for me. I have offered and encouraged a similar arrangement with the Chiefs. If they need me, fine, but I've tried not to become a nuisance.

I called Kansas City the other day for something, and the lady that answered the phone said, "Oh, I remember you when you were division engineer in Omaha." We had a long conversation. I enjoyed it a great deal, but that's very unusual. It doesn't take long for Chiefs to become has-beens. And that's good too! All retirees have the same situation-I believe they should nourish becoming "has-beens" unless needed.

Q: In recent years you have received a number of awards, including the prestigious Founder's Award from the National Academy of Engineering. Tell me about those awards.

A: I guess if you live long enough and remain active, you will receive awards. In my case there has been a small flood lately. The Beaver's Engineering Award, the Construction Industry Institute Award of Excellence, the National Academy of Engineering Founder's Award, the Gold de Fleury Medal from the Army Engineer Association and the Distinguished Engineering Alumni Award from the University of Iowa in February 1998. In March 1998 the Society of American Military Engineers selected me for their Golden Eagle Award. Finally in May 1998 the Association of Graduates of the United States Military Academy gave me a Distinguished Graduate Award during a parade of the Corps of Cadets as part of the annual alumni program. Each is for a different field and a truly outstanding recognition, so I would not want to compare or select a favorite. I can say, however, that the National Academy of Engineering's Founder's Award and the Distinguished Graduate Award were the most unexpected and have been received by some great Americans. I am honored and humbled by each and really wish everyone who helped me over so many years could, in some way, share and enjoy these acknowledgments. After all, only because of them were the awards given to me. No one can achieve these accolades by himself, and nowhere is this truer than in the Corps of Engineers and our industry.

Conclusion

Q: What do you see in the future for the Corps of Engineers?

A: A tough subject, which has concerned me since 1970. Most of my thoughts apply to **USACE** [U.S. Army Corps of Engineers] primarily. One thing is clear-as General Heiberg said recently, "The Corps' future will be different." The truth of this statement comes into better focus when I reflect on the Corps of Engineers I joined in 1943. At that time, the Chief of Engineers was the commander of all engineer soldiers and was responsible for Fort Belvoir, the Engineer Center. He assigned all officers in accordance with his career development policies, and he was responsible for the traditional engineer staff and engineer construction missions to include the politically sensitive public works program.

Beginning in the early **1960s**, a series of Army reorganizations, personnel management changes, and other modifications steadily reduced the scope of the Chief's responsibilities and authorities to their present level. The **USACE**, established in 1979, consolidated under the Chief of Engineers, as commander, those functions that survived and remained under his jurisdiction.

While the basic role and purpose of the Chief and his command to support the Army have not changed, the Corps today is much different than it was a few years ago.



David J. McGrath publisher of Engineering News-Record, congratulated General Morris after ENR named him "Construction's Man of the Year" in New York on 16 February 1977 at the Pierre Hotel.

As for the future, changes will continue. I am inclined to believe the reductions in responsibility and authority of the Chief of Engineers have reached a low point, and future modifications will begin an upward adjustment. This swing of the pendulum depends on the reversal of a trend which began three decades ago and apparently has become more serious in the last half of the period.

Q: Can you define this trend more clearly?

A: Yes, but first I want to establish the essential point that all short-term or specific action gains must be within the framework of the bedrock goal of "improving the support by the Corps of Engineers to the Army."

Q: What about the public works program of the Corps?

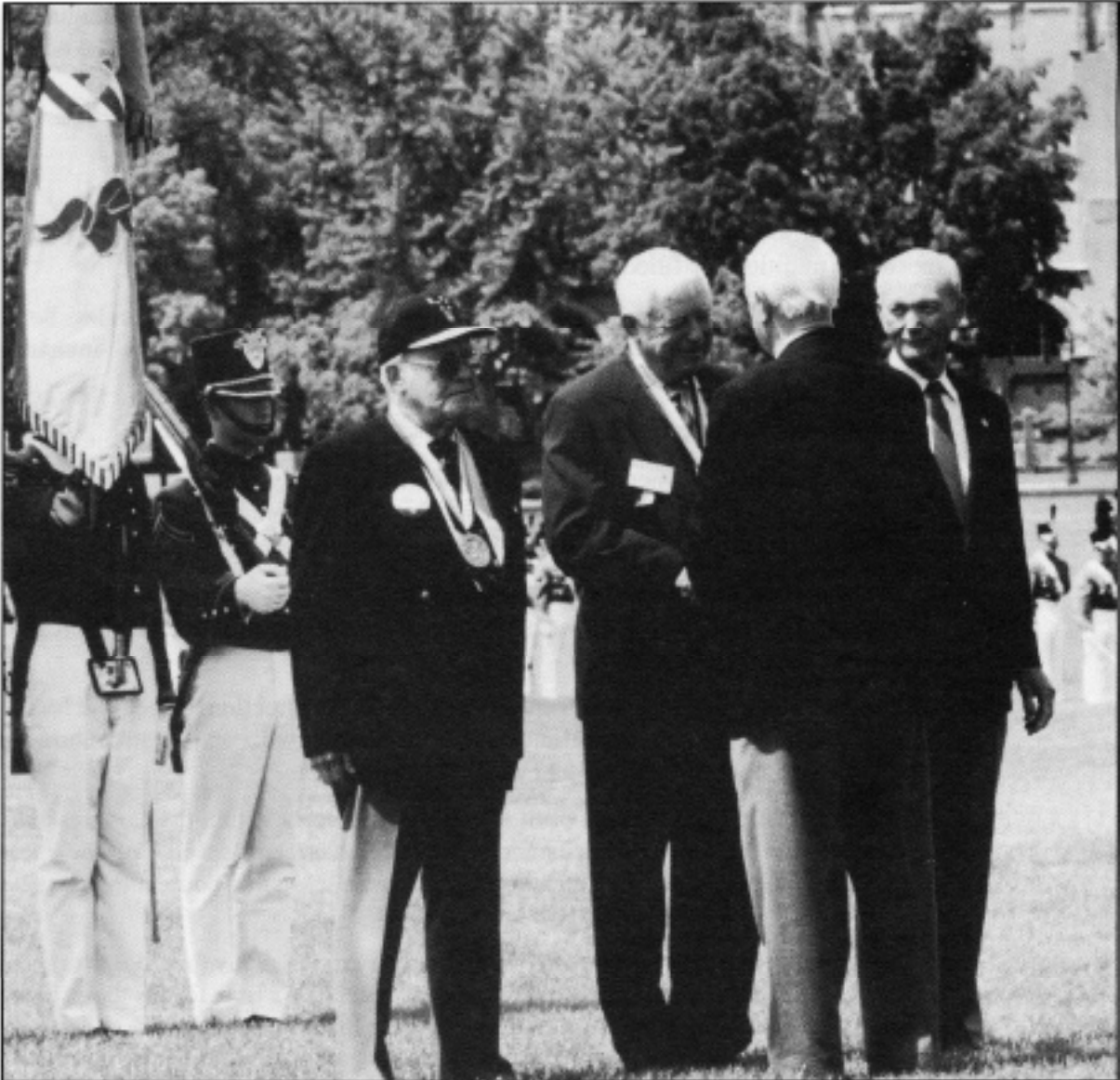
A: Chiefs of Engineers and most senior generals of the Army realize that the world's finest military engineer capability is in the U.S. Army because of the added value generated through the professional practices demanded by the civil works program-especially in peacetime. The trick for the Chief is to convince his military superiors that such is the truth. The Chief needs help and support, similar to that which I had, from the Chief of Staff and the Secretary of the Army. This comes from personal, frequent contact and involvement.

Q: All right. Back to the trends over the past 30 years or so.

A: As I see the past from a distance and through the veil of retirement, there appear to be several events which singularly and collectively have diluted the capability of the Chief of Engineers and his command (**USACE**) to fulfill their role of service to the Army in war and to the nation in peace.

Professionalism has softened steadily within **USACE** as—

- ▶ The Board of Engineers for Rivers and Harbors was abolished.
- ▶ Technical job prerequisites were broadened to attract nontechnical applicants to positions traditionally filled by engineers.
- ▶ Contracting authority has been removed from the district commander unless he or she branch transfers. As a consequence, the commander is denied a key **command-and-control** element essential in executing his responsibilities.
- . In-house engineering continues to give way to engineering by contract.
- ▶ Army career-development programs for the military have progressively favored repeated troop service to the disadvantage of and disservice to **USACE** and in the number and qualifications of general officers chosen for Corps roles.
- . A cultural change has occurred as the civil program trended away from *development* of resources toward *management* of resources. Even **so**, some development will always be in the mix of tasks.
- ▶ Operation and maintenance budgets now exceed the construction budget, and for the foreseeable future, environmental and operational matters will continue to capture the lion's share of both the military and public works budgets.
- ▶ The appreciation and support of the Corps of Engineers within the Congress has declined from all outward appearances. **USACE** has seen several of the most knowledgeable and supportive members of Congress leave that body in the last few years.
- ▶ The increasing demands of the Assistant Secretary of the **Army** for Civil Works on the time of the Chief of Engineers have reduced the Chief's time for his top-priority mission to support the Army. As a consequence, the historic, deep-seated, and widely spread lack of understanding and appreciation of the importance of the civil program within the uniformed Army has been aggravated and intensified. Having been directly involved with the assistant secretary's office during the first seven years of its operation and a close observer for the past 17 years, I believe this element of the secretariat needs to be evaluated in detail for composition, purpose, need, and possibly combining with another assistant secretariat such as Installations and Environment. I do not question the value of the **ASA/CW** office in the political arena and with Congress and senior elements of the Executive Branch. On the other hand, the **ASA/CW** currently has only one activity and one command to address. As a consequence, like a mother hen with one chick, the assistant secretary becomes overly involved in the internal activities of **USACE**. Over the years, this involvement has had the unexpected and unintended impact of reducing the Chief's time for supporting the Army. Both **USACE** and the U.S. Army suffer.



The Association of Graduates of the U.S. Military Academy presented General Morris (center) with the Distinguished Graduate Award along with MG Adrian St. John II (Ret.) (left) and MG Michael Collins (Ret.) (right) in 1998. (Photo courtesy of Assembly, Roger Pettengill, Academy Photo.)

. The importance of the Chief of Engineers and USACE suffered a major setback when many of the duties of the Assistant Chief of Engineers were assigned to a new DA staff element. The reasons for this move are not clear to me, but the effects seem clear.

Of course, there have been other developments which are more positive and provide the basis for my observation that the pendulum will swing in a direction more favorable to the Chief of Engineers and USACE

. The civilian staff within USACE remains outstanding and must continue to be so, for herein lies the strength of USACE

- ▶ Within the engineering construction community, the Corps remains highly regarded; however, there is a noticeable rise in dissatisfaction with the new contracting officer situation.
- ▶ Major reductions in end-strength and budgets have placed pressure on military post commanders responsible for a well-maintained and smooth-running installation. This is an opportunity for **USACE** to support the Army.
- ▶ The growing role of the U.S. military in international peacekeeping magnifies the importance, value, and opportunity for engineers on the Army team.
- ▶ As indicated earlier, the basic missions of the U.S. Army Corps of Engineers have not changed.

Q: So there seem to have been some good as well as some bad events over the past years?

A: *Yes*, that is true, but collectively the effect has been to weaken the Corps significantly. Within the positive aspects, however, lies the basis for future growth in the Corps as we know it. So long as our mission, our reputation, and our civilian staff remain intact, the opportunities seem ripe for the Chief and his command to become the strong arm of the U.S. Army in nation building and in the operation and maintenance of military facilities.

I believe these opportunities can become reality if-

' The overarching goal of the Chief and his entire command is in fact and by appearance, "Support to the U.S. Army."

▶ Near-term actions successfully reverse the events which, over time, have diluted the capability of **USACE** to fulfill its role and which challenge the Chief of Engineers' ability to influence DOD and DA policy and activities. Crucial is the need to restore contracting authority to district commanders. Failure to do so may well lead, in due course, to the elimination of military personnel in these positions. Also important are improving the career patterns of rising officers and the selection ratio of general officers for **USACE**, developing a personal and direct relationship with the Secretary of the Army and the Chief of Staff, and restoring the purposes and effectiveness of the ACE's shop.

In simpler terms, this relates to improving the authorities and training of the military leadership within **USACE** and the influence of the Chief of Engineers outside **USACE**.

In summary, the commander of **USACE** has an unusually good opportunity to move himself and his command into a stronger and more meaningful position in the U.S. Army over the near term (3 to 5 years). The current Chief has my best wishes, for if he is unable to make the **short-term** adjustments during his tour, I am afraid the pendulum will be stuck for a long time. Essayons!

One final thought relates to marketing the Corps and **USACE** especially. In many ways **USACE** is a business and must promote itself to attain the highest level of customer satisfaction and to generate new customers. Of course, doing a good job is *the* essential element, but in today's fast-moving world, this alone is not enough to sustain, much less "grow" the business. An aggressive, multifaceted communications and public relations program including a little "tub-thumping" is in order at all times. In this regard, the fledgling Army Engineer Association and its *Army Engineer Magazine* provide a new and valuable means to draw the entire engineer family **together**—troop units and **USACE**, civilian and

military, retired and **active**—and to broaden understanding within the U.S. Army. An excellent asset.

Now I can ask a question: “What is left to discuss?”

Q: That is about it, unless you have something more.

A: There are two final thoughts:

First, my entire career has been blessed with good fortune and great assistance from outstanding men and women. None was more important and supportive than my immediate family. My wife, Gerry, was 100 percent devoted to helping me during more than 37 years of Army duties, and our two children, Susan and John, were more interested and involved than I realized at the time. The three of them not only allowed me to focus my attention on the work of the Army, but encouraged it.

Now, in closing, a final word about the Corps. We read a great deal about leadership—both corporate and military. The libraries are full of publications on the subject. The students of organizational effectiveness need look no further than the U.S. Army Corps of Engineers for the best example of an agency which has served the U.S. Army, the United States, and the world with great success and effectiveness for 200 years. Its personnel make it so and will keep it so.